WOODLAND PRUNING (660)

Definition

Removing all or parts of selected branches from trees.

Purpose

To improve the quality of the wood products or the appearance of the trees.

Condition Where Practice Applies

1. On land growing trees where the quality of the final product and the potential of the site justify the cost;

2. Where removing all or parts of branches enhances the beauty of the area;

3. On Christmas tree plantations where removing all or parts of branches increases the quality and value of the trees.

4. Disease control by removing infected branches.

Specifications

Prune white and red pine where site index is 65 or greater.

Prune norway spruce, black walnut, and other hardwoods where site index is 75 or greater.

Pruning for Wood Products
Start early pruning when trees are 4" to 6" dbh, and at least 12 feet tall. Complete pruning by the time trees are 10" dbh.

Prune to 18 feet to produce a 17 foot veneer log or 10 feet to produce a 9 foot veneer log. First pruning is to a height of at least 9' when height of trees will permit.

See drawings on page 3 concerning difference between pruning hardwoods and conifers.

Do not remove more that one-third of the live crown at any one time. If the crown is thin or light, less than one-third of the crown should be removed. It may be necessary to prune a tree two or more times over a period of years, depending on the age or size of the stand. At the time of the first pruning, limbs are pruned close (flush) to the trunk using a pruning saw or shears.

Pruning should be done during the dormant season on black walnut and other hardwoods; any convenient time on conifers.

Prune to improve the aesthetics of an area or for reduction of fire hazard by removing limbs to any height necessary.

Prune or shear to improve the quality of Christmas trees. The growing of Christmas trees is a specialized business. These specifications are only general in nature.

Shearing: Most Christmas trees are sheared annually beginning when trees are around 2 feet tall. Shear pines between early June and Mid-July before new growth hardens. Spruces and firs, including Douglas-fir may be sheared during the dormant season of August to April. Make cuts at a space just above a single bud. Scotch pine - start pruning when new needle growth is 3/4 as long as last years needle length.

Reducing Leader Growth:

a. Fir or spruce. Select a group or cluster of buds (4 or more) at a point about 12 inches above the last whorl. These will form a false whorl the next season and will increase the density. At least 2-1/2 inches above this group of buds or false whorl, select a strong bud. Cut the terminal leader about 1/8" above the bud and at a 45 degree angle. Remove any buds, between the tip bud and the false whorl. Cut back several inches of the upper branch tips to prevent them from turning up to become leaders.

b. Pines. Cut the leader off at a 45 degree angle to encourage formation of a single strong leader bud on the high point of the cut. Leader growth should be about 12 inches. The top whorl should be cut back about 40 percent as long as the sheared leader to prevent the tips from turning up as new leader growth. This should be done at the same time as shearing.

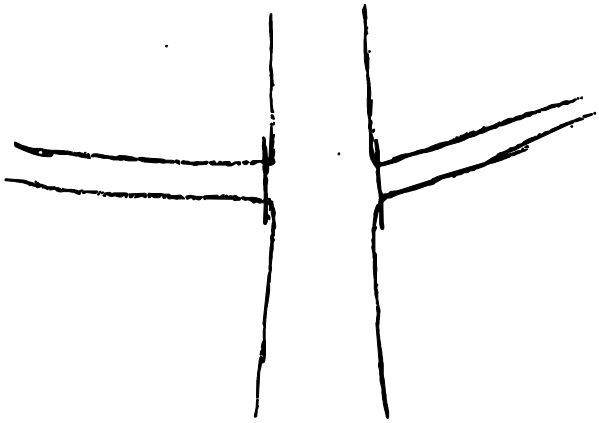
Basal Pruning: Unwanted branches between the bottom of the Christmas tree and ground can be removed. The selected basal whorl or group of limbs should be as low as practical. It is used to provide the needed handle.

Reference:

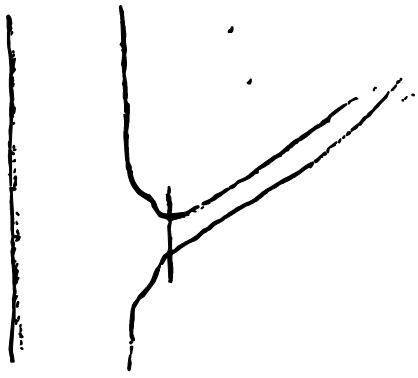
CHRISTMAS TREE CULTURE AND MARKETING, WVU, Coop. Ext Ser., Pub. 525

BLACK WALNUT AS A CROP, USDA Forest Service, General Technical Report, NC-4, 1973

Conifers are pruned flush to the bark.



Deciduous trees are pruned to create as short a stub as possible without damaging the branch collar. The branch collar is a swelled area at the base of the branch. Disturbing the branch collar prolongs the time required for the branch stub to heal.



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Planning considerations for water quantity and quality

Quantity

1. Effects on the components of the water budget.

Quality

1. Effects on erosion and the movement of sediment and soluble and sediment-attached substances carried by runoff or ground water recharge.